

SECTION 1 Components of a Computer System

Recommended Prior Knowledge

Students will require basic experience of using a desktop computer. This includes the use of a mouse, keyboard, monitor and printer. They should know how to save files of information.

Context

This section should be the first studied by the students as all other sections build on this knowledge.

Outline

This section outlines the hardware and software required to form a typical computer system.

section	Learning Outcomes	Suggested Teaching Activities	Online Resources	Other resources
1a	Define hardware, giving examples	<ul style="list-style-type: none">Take the top or side panels off a desktop computer and illustrate the components which are 'hard' to the touch.List examples of hardware such as the internal components of a computer as well as peripheral devices	www2.wmin.ac.uk/eic/learning-skills/computer/HARDWARE.HTM http://www.bbc.co.uk/schools/gcsebitesize/ict/hardware/index.shtml	(Walmsley, et. al., 2004, Chapter 1)
1b	define software, giving examples	<ul style="list-style-type: none">Demonstrate the use of an operating system to create folders, save work, sort files.Demonstrate different types of application software such as word-processor, database, spreadsheet and DTP.	www2.wmin.ac.uk/eic/learning-skills/computer/SOFTWARE.HTM	(Walmsley, et. al., 2004, Chapter 1)
1c	Describe the difference between hardware and software	<ul style="list-style-type: none">Reinforce the concepts of hardware and software	www2.wmin.ac.uk/eic/learning-skills/computer/computer_parts.htm	(Walmsley, et. al., 2004, Chapter 1)

section	Learning Outcomes	Suggested Teaching Activities	Online Resources	Other resources
1d	Identify the main components of a general-purpose computer: central processing unit, main/internal memory (including ROM and RAM), input devices, output devices and secondary/backing storage.	<ul style="list-style-type: none"> • Take the top or side panels off a desktop computer and illustrate the components including the floppy and hard disc drives. • Highlight the differences between input and output devices. 	http://www.jegsworks.com/Lessons/lesson1-2/lesson1-1.htm http://www.jegsworks.com/Lessons/lesson3/lesson3-1.htm http://www.jegsworks.com/Lessons/lesson4/lesson4-1.htm http://www.jegsworks.com/Lessons/lesson5/lesson5-1.htm http://www.jegsworks.com/Lessons/lesson6/lesson6-1.htm	(Sargent, & Walmsley, 2003, Chpts 1, 2, 3 & 7)
1e	Identify operating systems, including Graphic User Interface, command line interface	<ul style="list-style-type: none"> • Demonstrate the use of a 'Windows' type operating system using point and click to copy a file from a floppy disc to a folder in 'My Documents'. • Show how complicated it is to repeat this exercise using a command line interface. 	http://www.jegsworks.com/Lessons/lesson1-2/lesson2-1.htm (although the phrase 'text interface' is incorrectly used instead of the more correct 'command-line interface')	(Walmsley, et. al., 2004, Chapter 7)